

REMARKS

Claims 1-18, 21 and 22 remain pending in the subject application, of which claims 6-8, 14, 15, 17 and 18 are withdrawn. Claim 1 is the sole independent claim. Reconsideration of the pending claims is respectfully requested.

A. August 23, 2004 Information Disclosure Statement

A copy of the signed and initialed Form PTO-1449 evidencing the submission and the consideration of the references submitted to the U.S. Patent Office for consideration with August 23, 2004 Information Disclosure Statement on August 23, 2004 was attached to the outstanding Office action. However, with regard to the "Foreign Patent Document" section, the notation that an English Abstract was also submitted for each of the foreign references was crossed out. Applicants submitted an English Abstract of each of the Foreign reference cited on the August 23, 2004 Form PTO-1449 and thus, request that the Examiner consider the English Abstracts and return to applicants' undersigned representative another copy of the signed and initialed Form PTO-1449, which acknowledges consideration of the English Abstract for each of the foreign references.

B. Introduction

In the outstanding Office action, the Examiner rejected claims 1, 2, 3, 9, 10, 16 and 21 under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of JP 5-315293 ("the JP '293 reference"), U.S. Patent No. 3,543,839 to Sholsinger ("the Shlosinger reference") and JP 8-29080 ("the JP '080 reference"); rejected claims 4, 5 and 22 under 35 U.S.C. §103(a) as being unpatentable over the combined teachings of the JP '293 reference, the Shlosinger reference and the JP '080 reference in further view of JP 2-126049 ("the JP '049 reference"); and rejected claims 1, 2, 3, 4, 5, 9, 10, 16, 21 and 22 under 35 U.S.C. §103(a) as being unpatentable

over the combined teachings of the JP '293 reference, JP 5-99580 ("the JP '580 reference") and optionally the JP '080 reference.

C. Asserted Obviousness Rejection of Claims 1, 2, 3, 9, 10, 16 and 21

In the outstanding Office action, the Examiner rejected claims 1, 2, 3, 9, 10, 16 and 21 under 35 U.S.C. § 103(a) as being unpatentable over the JP '293 reference, the Shlosinger reference and the JP '080 reference. The rejection is respectfully traversed for at least the following reasons.

Applicants submit that the combination of the JP '293 reference, the Shlosinger reference and the JP '080 reference fails to disclose or suggest the combination of features recited in independent claim 1 including, *inter alia*, a heater for heating the top surface by heating the working fluid.

Page 2 of the Office action states that the JP '293 reference discloses a heater 24. Applicants respectfully note, however, with regard to the "heater" feature of claim 1, it is not sufficient for a reference to merely disclose a heater. The reference must disclose a heater that satisfies all the features of the heater, as recited in claim 1. Thus, the heater must **heat a top surface of the heat pipe by heating the working fluid** and applicants submit that the heater 24 of the JP '293 reference does not heat the top surface of a heat pipe by heating working fluid, as required by claim 1. As shown in FIG. 4 of the JP '293 reference, the heater 24 is arranged below the wafer W and above the heat pipe 40 containing the working fluid 42, and the heater 24 does not heat a top surface of the heat pipe 40 by the working fluid 42 as the top surface of the heat pipe 40 of the JP '293 reference is arranged between the heater 24 and the working fluid 42 so, even if the working fluid 42 was to be heated by the heater 24, the heater 24 would first heat the top surface of the heat pipe 40.

Applicants submit that the Shlosinger reference and the JP '080 reference also fail to disclose a heater having all the features recited in claim 1. For at least these reasons, applicants submit that the combination of the JP '293 reference, the Shlosinger reference and the JP '080 reference fails to disclose or suggest the combination of features recited in independent claim 1, as well as all the features of claims 2, 3, 9, 10, 16 and 21, which directly or indirectly depend from claim 1. It is respectfully requested that the rejection be withdrawn.

D. Asserted Obviousness Rejection of Claims 4, 5, and 22

In the outstanding Office action, the Examiner rejected claims 4, 5 and 22 under 35 U.S.C. § 103(a) as being unpatentable over the JP '293 reference, the Shlosinger reference and the JP '080 reference in further view of JP 2-126049 ("the JP '049 reference"). The rejection is respectfully traversed for at least the following reasons.

As discussed above, the combination of the JP '293 reference, the Shlosinger reference and the JP '080 reference fails to disclose or suggest all the features of independent claim 1, from which claims 4, 5 and 22 directly or indirectly depend. Applicants submit that the JP '049 reference fails to overcome the deficiencies of the combination of the JP '293, the Shlosinger reference and the JP '080 reference, as applied to claim 1. For at least these reasons, applicants submit that the combination of the JP '293, the Shlosinger reference, the JP '080 reference and the JP '049 reference fails to disclose or suggest all the features of claims 4, 5 and 22. It is respectfully requested that the rejection be withdrawn.

E. Asserted Obviousness Rejection of Claims 1, 2, 3, 4, 5, 9, 10, 16, 21 and 22

In the outstanding Office action, the Examiner rejected claims 1, 2, 3, 4, 5, 9, 10, 16, 21 and 22 under 35 U.S.C. §103(a) as being unpatentable over the combined teachings of the JP

'293 reference, JP 5-99580 ("the JP '580 reference") and optionally the JP '080 reference. The rejection is respectfully traversed for at least the following reasons.

Applicants submit that the combination of the JP '293 reference, the JP '580 reference and the JP '080 reference fails to disclose or suggest the combination of features recited in independent claim 1 including, *inter alia*, a heater for heating the top surface by heating the working fluid.

Page 4 of the Office action states that the JP '293 reference discloses a heater 24. Applicants respectfully note, however, with regard to the "heater" feature of claim 1, it is not sufficient for a reference to merely disclose a heater. The reference must disclose a heater that satisfies all the features of the heater, as recited in claim 1. Thus, the heater must **heat a top surface of the heat pipe by heating the working fluid** and applicants submit that the heater 24 of the JP '293 reference does not heat the top surface of a heat pipe by heating working fluid, as required by claim 1. As shown in FIG. 4 of the JP '293 reference, the heater 24 is arranged below the wafer W and above the heat pipe 40 containing the working fluid 42, and the heater 24 does not heat a top surface of the heat pipe 40 by the working fluid 42 as the top surface of the heat pipe 40 of the JP '293 reference is arranged between the heater 24 and the working fluid 42 so, even if the working fluid 42 was to be heated by the heater 24, the heater 24 would first heat the top surface of the heat pipe 40.

Applicants submit that the JP '580 reference and the JP '080 reference also fail to disclose a heater having all the features recited in claim 1. For at least these reasons, applicants submit that the combination of the JP '293 reference, the JP '580 reference and the JP '080 reference fails to disclose or suggest the combination of features recited in independent claim 1,

as well as all the features of claims 2, 3, 4, 5, 9, 10, 16, 21 and 22, which directly or indirectly depend from claim 1. It is respectfully requested that the rejection be withdrawn.

F. Rejoinder of Non-Elected Withdrawn Claims 6-8, 14, 15, 17 and 18

Upon allowance of independent claim 1, applicants request rejoinder and allowance of non-elected withdrawn claims 6-8, 14, 15, 17 and 18, which directly or indirectly depend from claim 1.

G. Conclusion

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

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PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.